Gianfranco GILARDI Q88296 Preliminary Amendment Page 2

## **AMENDMENTS TO THE SPECIFICATION**

Please add the following new Abstract of the Disclosure:

## **ABSTRACT**

The protein of this invention comprises a 4- $\alpha$ -helix bundle motif formed from the  $\alpha$ -helices of rop (repressor of primer) and a redox centre. In this invention the redox centre is preferably haem and the iron is preferably coordinated to the  $\alpha$ -helices of the rop structure via histidine residues. Such a protein is very stable and has the same specific activities as natural redox proteins with the increased stability in the interaction with electrode surfaces. Also provided by this invention is a method of engineering proteins to develop redox proteins from structures which previously had no redox functions.